

Elk County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Elk County economy.¹

These 15 sectors have a total direct output of approximately **\$63.0 million** and support **411 jobs** in Elk County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Elk County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	411.2	26.57%	\$16,726,082	24.33%	\$63,009,981
Indirect Effect	38.7	2.50%	\$1,991,900	2.90%	\$4,965,243
Induced Effect	31.7	2.05%	\$1,656,357	2.41%	\$3,538,335
Total Effect	481.6	31.11%	\$20,374,339	29.63%	\$71,513,560

As shown in the above table, agriculture, food, and food processing sectors support **481 jobs**, or **31.11%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately **\$20.4 million**, or **29.63% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:
<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **320 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Elk County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	320.0	\$38,697,732
Meat processed from carcasses	28.2	\$13,465,561
All other crop farming	15.3	\$1,193,577
Landscape and horticultural services	12.0	\$500,842
Veterinary services	9.9	\$860,147
Wholesale trade	8.4	\$1,135,408
Animal production, except cattle and poultry and eggs	6.4	\$746,823
Greenhouse, nursery, and floriculture production	6.2	\$675,122
Extraction of natural gas and crude petroleum	5.5	\$899,782
Grain farming	5.4	\$1,991,060

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$38.7 million** to the Elk County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	320.0	\$38,697,732
Meat processed from carcasses	28.2	\$13,465,561
Oilseed farming	3.6	\$3,727,698
Grain farming	5.4	\$1,991,060
All other crop farming	15.3	\$1,193,577
Wholesale trade	8.4	\$1,135,408
Owner-occupied dwellings	0.0	\$1,114,189
Extraction of natural gas and crude petroleum	5.5	\$899,782
Veterinary services	9.9	\$860,147
Animal production, except cattle and poultry and eggs	6.4	\$746,823

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Elk County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.6	\$3,727,697.61
Grain farming	5.4	\$1,991,060.50
Fruit farming	0.6	\$39,743.10
Tree nut farming	0.3	\$38,047.86
Greenhouse, nursery, and floriculture production	6.2	\$675,122.26
All other crop farming	15.3	\$1,193,577.29
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	320.0	\$38,697,731.02
Dairy cattle and milk production	1.2	\$394,074.41
Poultry and egg production	0.3	\$182,143.52
Animal production, except cattle and poultry and eggs	6.4	\$746,822.60
Support activities for agriculture and forestry	0.5	\$65,031.25
Meat processed from carcasses	28.2	\$13,465,561.87
Farm machinery and equipment manufacturing	1.4	\$432,378.17
Veterinary services	9.9	\$860,147.42
Landscape and horticultural services	12.0	\$500,842.21

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Elk County, the retail sector was omitted.